

Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application.

Listing of Claims:

1. (Currently Amended) A method for producing cell-specific retroviral vectors, the method comprising

- (a) immunizing a mammal with one or more cell population(s),
- (b) isolating RNA from the immunized mammal, the RNA comprising RNA from a B cell,
- (c) producing, from the isolated RNA, a cDNA cDNAs that encodes a encode single chain ~~antibody antibodies~~ (scFV-cDNAs scFv-cDNAs),
- (d) ~~ligating the~~ ligating the scFv-cDNAs into a ~~phagemid vector~~ phagemid vector,
- (e) transforming a host bacterium with the phagemid vector,
- (f) isolating phages that bind to the cell population(s),
- (g) excising the scFv-encoding cDNA from the ~~cell-specific~~ phages obtained in step (f) and ligating the cDNA into a psi-negative retroviral Env expression vector, comprising an env gene, to produce an Env-scFv expression vector,
- (h) transforming the Env-scFv expression vector into a packaging cell, and
- (i) isolating the retroviral vectors secreted by the packaging cell.

2. (Currently Amended) The method of claim 1, ~~wherein the~~ further comprising isolating cell-specific phages from the phages obtained in step (f), which only bind to the cell population(s) used in step (a), by means of selection ~~are isolated~~.

3. (Previously Presented) The method of claim 1, wherein step (f) is repeated at least once.

4. (Currently Amended) The method of claim 1, further comprising the step of:
(j) isolating the retroviral vectors secreted by the packaging cell, which transduce the cells of the cell ~~population(s)~~ population(s), by means of selection.
5. (Previously Presented) The method of claim 1, wherein the mammal is a mouse, rat, guinea pig, rabbit, goat or sheep.
6. (Previously Presented) The method of claim 1, wherein the cell population(s) is/are human, mouse, rat, sheep, cattle or pig.
7. (Previously Presented) The method of claim 6, wherein the cell population(s) is/are T cells, epithelial cells, muscle cells, hematopoietic cells, stem cells, neural cells, carcinoma cells or liver cells.
8. (Previously Presented) The method of claim 1, wherein the env gene of the psi-negative retroviral Env expression vector is derived from spleen necrosis virus (SNV).
9. (Currently Amended) The method of claim 8, wherein the psi-negative retroviral Env expression vector comprises the nucleotide sequence of SEQ ID NO:1.
19. (Currently Amended) The method of claim 8, wherein the psi-negative retroviral Env expression vector consists of the nucleotide sequence of SEQ ID NO:1.
20. (Currently Amended) A method for producing cell-specific retroviral vectors, the method comprising:
(a) immunizing a mammal with one or more cell population(s),
(b) isolating RNA from the immunized mammal, the RNA comprising RNA from a B cell,

(c) producing cDNA regions of the variable regions of the immunoglobulin heavy and light ~~chain chains~~ from the isolated RNA by means of RT-PCR with primers for the immunoglobulin heavy and light ~~chain chains~~, wherein the primers comprise the nucleic acid sequence for an oligopeptide linker,

(d) ligating the cDNA regions to ~~scFv-cDNAs~~ scFv-cDNAs,

(e) ~~ligating the~~ ligating the scFv-cDNAs into a ~~phagemid vector~~ phagemid vector, and transforming a host bacterium with the phagemid vector,

(f) isolating phages that bind to the cell population(s),

(g) isolating ~~cell-specific~~ cell-specific phages from the phages obtained in ~~step (f)~~ step (f), which only bind to the cell population(s) used in ~~step (a)~~ step (a), by means of a selection,

(h) ~~excising the~~ excising the scFv-encoding cDNA from the cell-specific phages obtained in ~~step (f)~~ step (g) and ligating the cDNA into a psi-negative retroviral Env expression vector to produce an Env-scFv expression vector,

(i) transforming the resulting Env-scFv expression vector into a packaging cell, and

(j) isolating the retroviral vectors secreted by the packaging cell.